Work Order ID 93187 Page 1 November-15-12 9:04:42 AM Item ID: D4034-041 Accept *N900040100* Setup Start **Revision ID:** Stop Aft Upper Rib Assembly Item Name: 11/15/12 Start Qty: 1.00 **Start Date: Cust Item ID:** Req'd Qty: 1.00 Required Date: 11/30/12 **Customer:** Reference: Run Process Plan: MLJ Date: 12-11-16 Tooling: Date: **Approvals:** Stop Date: SPC (Y/N): Date: Sequence ID/ Tool ID Reject **Operation** Set Up/ Tool # Plan Accept Reject Insp. Work Center ID Qty Number Stamp Description Code **Qty Run Hours Draw Nbr Revision Nbr** D4034 В Weld per dwg A/R S.S. rod Batch: M/18/6/ 100 0.00 ×3 13-03-20 MAL *100* Large Fab 0.00 Memo 1- Assemble ribs to hoop and weld as per dwg DT9564 Large Fab 2- Weld bushing in rib and grind weld flush as per dwg 110 QC9- Inspect visual per QSI004- Fusion Welds 0.00 B B-03-21 *110* QC 0.00 Memo Quality Control 120 OC5- Inspect part completeness to step on W/O 0.00 *120* (8) 13-03-21 QC 0.00 Memo

Quality Control

												DQA:	Dat	e: .	
NCR:	Yes	/ No				WORK ORDER NON-C	O	NFORM	ANCE / UP	DATE					
												QA Closed:	Dat	e:	
Work Ord	or.					DISPOSITION				AGAINST D	EF	PARTMENT	/PROCESS		
WOIK OIG	-					Rework	1		Skid-tube	Crosstube	٦		Water Jet	\neg	Engineering
Part I	No.					Scrap		i e	Machining	Small Fab	┨	Pro	d. Eng. Coor.	ㅓ	Quality
	•	•				Use-as-is	1	Therm	noforming	Finishing	٦	Rec/Stor	re/Packaging		Other
NCR I	No.				<u> </u>	Work Order Update]		Large Fab	Composite			Supplier		
Root					Descrip	tion of work order update	Ti	Initial	Act	tion	٦	Sign &			
Cause		Date	Step	Qty	C	or Non-conformance	Ch	nief Eng	` Desc	ription		Date	Verification	<u>. </u>	QC Inspector
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Ğċ		Centre No	ot Concer	ntric to O	/S	BOM/Route		Hardwa	re	L		Over/Under	tolerance		Temperature/Cure
34.7		Cracks				Broken/Damaged		Inspecti	on Incomplete			Part Incorre	ct		Weld
		Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/	Unclear		Part Lost/M	issing		Wrong Stock Pulled
		Cuffs				Contamination		Mainte	nance			Part Moved			
		Heat Trea	it			Countersink		Mislabe	led			Positioned V	V rong		_
		Inspectio	n Strip in	Tube		Cut Too Short		Misreac	I			Power Loss/	'Surge		Other
		Ripples in	Bend			Drill Holes		Offset		_					

Out of Calibration

Out of Sequence

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

02127

Page 2

November-15-12	9:04:42 AM	· !		9.7	I						1 450 2
Item ID: Revision ID:	D4034-041			Accept	*N900	<u>040</u> ′	100*	Setı	up Start	*N	S1*
Item Name:	Aft Upper Rib	Assembly							Stop	*N.	S2*
Start Date:	11/15/12	Start Qty: 1.00	*1*		Cust Item I	D:					
Required Date:	11/30/12	Req'd Qty: 1.00	*1*		Customer:						
Reference: Approvals:	Process Pla	n:	Date:	Tooling:	Ds	ate:		Rur	ı Start	*N	R1*
	QC:		Date:	SPC (Y/N):		ate:			Stop	*N	R2*
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Tool ID		Plan A Code Q	-	Reject Qty	Reject Number	Insp. Stamp
130		Identify as per dwg & St	ock Location: <u>UAO</u>	00.0 PC							
130 Packaging Packaging		Memo		0.00				3 e	,-03.1	· · · · · · · · · · · · · · · · · · ·	?D
140		QC21- Final Inspection	- Work Order Release	0.00					10/0	2/1	\bigoplus
140									13/3) 2 '	10
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Quality Control											NU
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Part I	۷o					Scrap	1		Machining	Small			d. Eng. Coor.	Quality
NCR I	۷o					Use-as-is Work Order Update			noforming Large Fab	Finish Compo	v \vdash H	Rec/Stor	e/Packaging Supplier	Other
0+	T				Dosori	ption of work order update		Initial	Λά	tion		Sign &		
Root Cause		Date	Step	Qty		or Non-conformance		nief Eng		ription		Date	Verification	QC Inspector
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Landi	ng G	ear				General		_				_	_	
		Bending				Bend		Grain				Ovalized		Pressure/Forced
		Centre N	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re		. L	Over/Under	tolerance	Temperature/Cure
	Ш	Cracks				Broken/Damaged		Inspecti	on Incomplete			Part Incorre	ct	Weld
		Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/	/Unclear		Part Lost/M	issing	Wrong Stock Pulled
	Ш	Cuffs				Contamination		Mainte	nance			Part Moved		
		Heat Trea	nt .			Countersink		Mislabe	eled			Positioned \	Vrong _	_
	Ш	Inspectio	n Strip in	Tube		Cut Too Short		Misread	d			Power Loss/	'Surge	Other
		Ripples ir	Bend			Drill Holes		Offset						

Out of Calibration

Out of Sequence

Outside Dimensions

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Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

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Picklist Print

November-15-12 9:04:41 AM

Work Order ID:

93187

Parent Item:

D4034-041

Parent Item Name:

Aft Upper Rib Assembly

Start Date: 11/15/12

Required Date: 11/30/12

Page 1

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP RevA: new issue DD 09.11.23 verified by:EC IPP Rev:B as per dwg revA 10.03.15 verified by:EC IPP Rev:C 11.01.19 AS PER DWG REV.B DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4034-1 Rib		Manufactured	No			100	Each	4.0000	1	1			
B-93576 B-95920	X/			Location WA 837 861		Loc Oty 4 1 3	<u>Lo</u>	oc Code		3	1.3	03-7	IG MA
D4034-3 Rib		Manufactured	No			100	Each	6.0000	1	1			
- B-94179	- x-3			Location WA 584 845 893	90	Loc Oty 6 0 1 5		oc Code		3	1-3-0	3-19	MAL
D4021-7 Hoop		Manufactured	No	0,2	.,	100	Each	34.0000	1	1			
				Location WA 569 874	87	Loc Oty 34 0 1 20		oc Code		3	13-0	73-14	a MA

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-C	O	NFORM	ANCE / UP	DATE			
					•					, ,	QA Closed:	Date	·
Work Orde	or.					DISPOSITION			"Mag.	AGAINST DE	PARTMENT	PROCESS	
Part !	_					Rework Scrap Use-as-is		ſ	Skid-tube Machining noforming	Crosstube Small Fab Finishing		Water Jet d. Eng. Coor. e/Packaging	Engineering Quality Other
NCR I	No					Work Order Update			Large Fab	Composite		Supplier	
Root					Descri	ption of work order update	П	nitial	Ac	tion	Sign &		
Cause		Date	Step	Qty	C	or Non-conformance	Ch	nief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling													
Operator													
Material													
Setup							1		,				
Other									•				
Process											,		
Supplier													
Training			ļ				ļ						
Unapproved											<u></u>		
						F	AUL	T CATE	GORY				
Landi	ing G	ear				General		_			-	-	=
		Bending				Bend	L	Grain			Ovalized		Pressure/Forced
	Щ	Centre No	ot Concer	ntric to (D/S	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct _	Weld
		Crushed/	Crimped.			Burrs	L	Instruct	ions Incomplete/	'Unclear	Part Lost/M	issing	Wrong Stock Pulled
		Cuffs				Contamination		Mainte	nance		Part Moved		
		Heat Trea	it			Countersink		Mislabe	led		Positioned \	Vrong	_
		nspectio	n Strip in	Tube		Cut Too Short		Misread	I		Power Loss/	Surge	Other
		Ripples in	Bend			Drill Holes		Offset					
		Torque W	aves in E	xtrusior	, <u> </u>	Drawing		Out of (Calibration				

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Finish

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November-15-12 9:04:42 AM

Work Order ID:

93187

Parent Item:

D4034-041

Parent Item Name: Aft Upper Rib Assembly

D4021-9 Bushing

Manufactured

No

100

Each

103.0000

Start Date: 11/15/12

Start Qty: 1.00

Required Qty: 1.00

Required Date: 11/30/12

Location	Loc Qty	Loc Code	
WA	93		
66437	0		~X=1=
72482	0		
82977	1		
84717	3		
88077	23		
88377	7		
92020	59		
WA005	10		
66437	2		
70333	4		
72482	4		

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-C	COI	NFORM	ANCE / UP	DATE			(*
								<u> </u>			QA Closed:	Date	
Work Orde	er.					DISPOSITION				AGAINST DE	PARTMENT,	/PROCESS	
	_					Rework Scrap		1	Skid-tube Machining	Crosstube Small Fab	4	Water Jet d. Eng. Coor.	Engineering Quality
NCR I	No	····			· · · · · · · · · · · · · · · · · · ·	Use-as-is Work Order Update			noforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root					Descri	ption of work order update	Π	Initial	Ac	tion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data					• • • • • • • • • • • • • • • • • • • •								
Equip/Tooling	Ш												
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Other	Ш												
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	-	Bending				Bend	_	Grain		_	Ovalized	<u> </u>	Pressure/Forced
	-	Centre No	ot Concei	ntric to (D/S	BOM/Route	_	Hardwa		ļ	Over/Under		Temperature/Cure
	-	Cracks			<u> </u>	Broken/Damaged	_	4 '	on incomplete		Part Incorre	<u> </u>	Weld
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	-	Cuffs			L	Contamination	\vdash	Mainte			Part Moved		
	$\boldsymbol{\vdash}$	Heat Trea			igspace	Countersink	<u></u>	Mislabe			Positioned \		¬
	\vdash	Inspection		Tube	<u> </u>	Cut Too Short		Misread	d		Power Loss,	'Surge	Other
	\vdash	Ripples in				Drill Holes	_	Offset					
		Torque W	aves in E	xtrusion	۱	Drawing		Out of 0	Calibration				

Out of Sequence

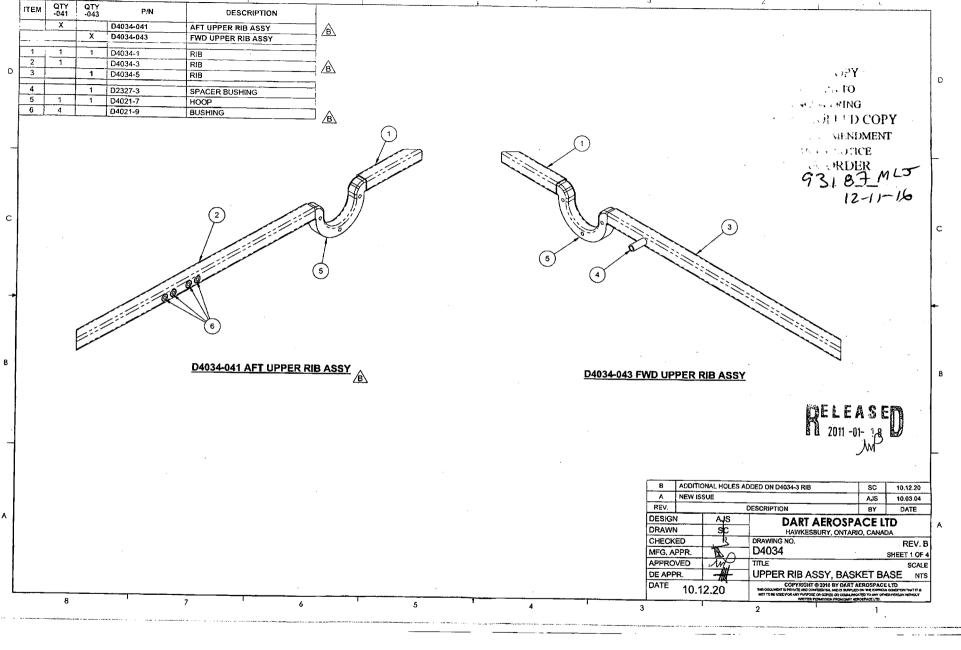
Outside Dimensions

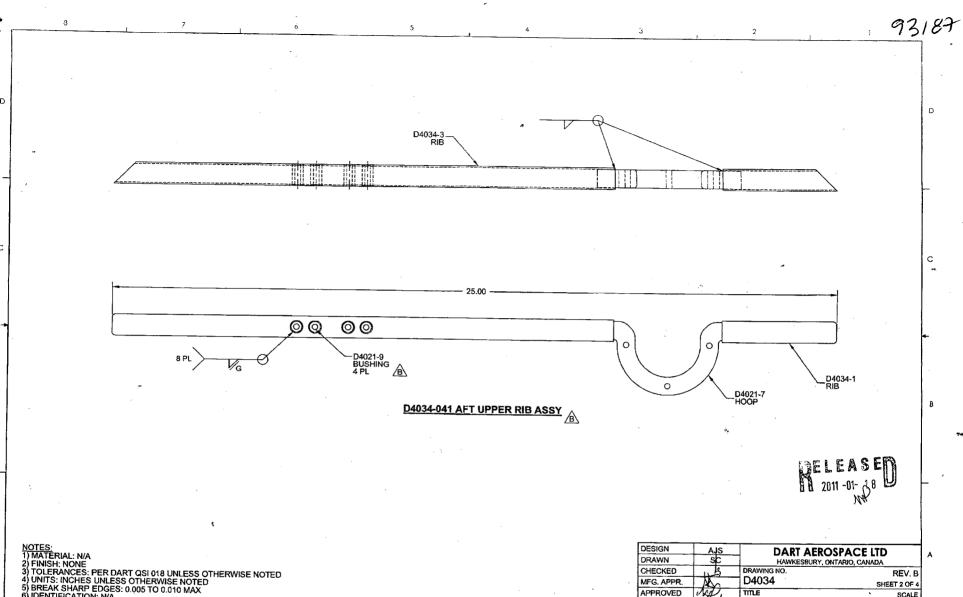
Turning Sequence

Wave/Twist in Tube

Finish

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NOTES:
1) MATERIAL: N/A
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 1.61 Ibs
8) WELD PER DART QSI 004

DESIGN	AJS	DART AEROSPAC	FITD	
DRAWN	sc	HAWKESBURY, ONTARIO, C		
CHECKED	113	DRAWING NO.		REV. B
MFG. APPR.	Ass	□ D4034	SHEE	T 2 OF 4
APPROVED	MAD,	TITLE		SCALE
DE APPR.	-#	UPPER RIB ASSY, BASKE	T BASE	NTS
DATE 10.	12.20	COPYRIGHT © 2010 BY DART AERO THIS COCUMENT IS PRIVATE AND CONFESSION, AND IS SUPPLED ON THE HOT TO SE USED POR ANY PURPLES OR COMED OR COMMUNICATED TO	E EXPRESS CONDITIO	

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